

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/US2004/022347

**A. CLASSIFICATION OF SUBJECT MATTER**  
**IPC 7 G01B15/04 H01J37/28 G01R31/305**

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
**IPC 7 G01B H01J G01R H01L**

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2002/179812 A1 (KOCHI NOBUO ET AL) 5 December 2002 (2002-12-05)	1,2,4,5, 8,15,17, 42-44
Y	paragraphs '0007!, '0023!, '0124!; claims 5,11,20,18; figure 15	3,6,7, 20-24
X	WO 01/45136 A (APPLIED MATERIALS, INC; GOLDENSTEIN, ALEX; BEN-AV, RADEL; PEARL, ASHE) 21 June 2001 (2001-06-21) page 6, line 23 - line 25; page 8, line 12 - line 14; page 13, line 17 - line 20 page 8, line 9 - line 20; claims 1,7,13,14; figure 2	1,15, 37-39, 41,42
Y		3,6,7, 20-24
		-/-

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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\*X\* document of particular relevance; the claimed Invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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Date of the actual completion of the International search

24 August 2005

Date of mailing of the International search report

02/09/2005

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	PATENT ABSTRACTS OF JAPAN vol. 010, no. 322 (P-511), 31 October 1986 (1986-10-31) & JP 61 128114 A (TOSHIBA CORP), 16 June 1986 (1986-06-16) abstract -----	1-45
E	WO 2004/072631 A (APPLIED MATERIALS ISRAEL, LTD; APPLIED MATERIALS, INC; INTERNATIONAL B) 26 August 2004 (2004-08-26) abstract; claims 1,48 -----	1,9,15, 25,37
P,A	WO 2004/008255 A (APPLIED MATERIALS, INC; APPLIED MATERIALS ISRAEL, LTD; SENDER, BENZION) 22 January 2004 (2004-01-22) abstract; claims -----	1-45
A	EP 0 441 373 A (KABUSHIKI KAISHA TOSHIBA) 14 August 1991 (1991-08-14) abstract -----	1-45

**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International Application No

PCT/US2004/022347

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
US 2002179812	A1	05-12-2002	JP	2002270126 A		20-09-2002
			JP	2002270127 A		20-09-2002
			JP	2002270124 A		20-09-2002
			US	2005040332 A1		24-02-2005
-----						
WO 0145136	A	21-06-2001	WO	0145136 A1		21-06-2001
			EP	1238405 A1		11-09-2002
			JP	2003517199 T		20-05-2003
-----						
JP 61128114	A	16-06-1986		NONE		
-----						
WO 2004072631	A	26-08-2004	AU	2003298774 A1		06-09-2004
			WO	2004072631 A2		26-08-2004
-----						
WO 2004008255	A	22-01-2004	AU	2003263776 A1		02-02-2004
			EP	1523671 A2		20-04-2005
			WO	2004008255 A2		22-01-2004
-----						
EP 0441373	A	14-08-1991	JP	2079008 C		09-08-1996
			JP	3233310 A		17-10-1991
			JP	7111336 B		29-11-1995
			DE	69112090 D1		21-09-1995
			DE	69112090 T2		09-05-1996
			EP	0441373 A2		14-08-1991
			KR	9407113 B1		05-08-1994
			US	5159643 A		27-10-1992
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